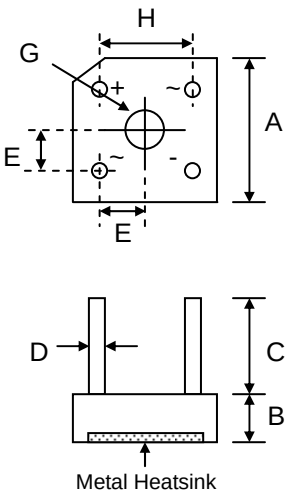
MP1000 – MP1010

10A SINGLE-PHASE BRIDGE RECTIFIER

Features

- Diffused Junction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has UL Flammability 94V-0
- Recognized File # E157705



MP-10		
Dim	**Min**	**Max**
A	14.73	15.75
B	5.80	7.10
C	19.00	—
D	1.00 Ø Typical	
E	5.11	6.14
G	Hole for #6 screw	
	3.60	4.00
H	10.30	11.30
All Dimensions in mm		

Mechanical Data

- Case: MP-10, Molded Plastic with Heatsink
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Weight: 3.8 grams (approx.)
- Mounting Position: Through Hole for #6 Screw
- Mounting Torque: 10 cm-kg (8.8 in-lbs) Max.
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings and Electrical Characteristics @T_A=25℃ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	MP 1000	MP 1001	MP 1002	MP 1004	MP 1006	MP 1008	MP 1010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T_A = 50℃	I_O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Forward Voltage per leg @I_F = 5.0A	V_{FM}	1.1							V
Peak Reverse Current @T_A = 25℃ At Rated DC Blocking Voltage @T_A = 125℃	I_R	5.0 500							μA
I^2t Rating for Fusing (t<8.3ms) (Note 2)	I^2t	64							A^2s
Typical Junction Capacitance (Note 3)	C_j	110							pF
Typical Thermal Resistance per leg (Note 1)	R								